

## INTEGRATION OF EDUCATIONAL ROBOTICS TO SCIENTIFIC LEARNING TEACHING PROCESS

#### **OCTOBER** 2022

## Science e-Robot 2020-1-TR01-KA201-092601

ISSUE

Hello to the reader!

**Our Focus!** 

It is the relationship between core

competencies and scientific

literacy.

To develop scientific literacy within

the consortium by contributing to

educational robotics technology

into the scientific learning and

by

of

basic

integrating

**1.PROJECT GOAL** 

development

the

competencies

teaching process.

Welcome to the third digital newsletter of the Science e-Robot project. The general goal of this 24-month project is; To increase the quality of education by contributing to the integration of technology into the learning and teaching process in order to increase the level of acquisition of 21st century basic skills. You will find details about the project in the following sections. We wish you pleasant reading in advance.



## IN THIS ISSUE

1.Project Purpose and Goals 2.What did we do? **3.Our Intellectual Outputs** 4. Project Partners - Consortium 5.What will we do? - Future Steps 6.Contact Us

teaching models, assessment and evaluation and https://www.scienceerobot.com/ scienceerobot@gmail.com info@scienceerobot.com



### **PROJECT OBJECTIVES**

1. Developing an innovative science learningteaching strategy compatible with the educational context of partner countries regarding the scientific learning-teaching process in which educational robotics is integrated for target groups by developing 3 intellectual outputs;

2. Increasing the knowledge and skills of 42 personnel from partner organizations on different

robotic methods/techniques in interdisciplinary science teaching;

3. By organizing 5 large-scale multiplier events and other dissemination activities; developing the knowledge skills of at least 200 Science teachers, 50 pre-service teachers and 100 experts on the use of intellectual outputs developed under this partnership;

4. To develop the basic competence and scientific literacy of students aged 10-17 through educational robotics:

5. To develop long-term innovative cooperation between partners.

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Integration of Educational Robotics to Scientific Learning

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METHODS

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Teaching Process Hüseyin GÜREL, Ahmet TAKAN Department of Teaching, Kuradacı Science and Art Center, TURKEY

### 2. WHAT DID WE DO?

### Our TPM-3

Our 3rd Transnational Project Meeting (TPM-3) was held on 02 - 03 November 2022 in Berlin, hosted by our German partner RobyCode UG. All project partners attended the meeting and there were 18 participants including the host.

The main agenda items of the meeting are; assessing the progress of the project, discussing and planning future tasks (multiplier events), evaluating monitoring reports, discussing dissemination efforts and discussing intellectual outputs. In addition, various ideas have been put forward for the sustainability of the project. Through brainstorming, we agreed to develop an eTwinning project and make a sustainability statement. We also brought to the attention of our partners that our project will take place both as a digital poster and as a presentation at the 4th Scientix Conference (18-19 November 2022).





#### **STEM Goes Digital**

E-WORKBOOK:

TEACHING

A representative from Science E-Robot has been invited to a (closed) seminar on STEM Goes Digital, which had take place online on September 28, 2022.

The event was organized by Scientix as part of networking seminars that brought together key stakeholders such as Ministries of Education (MoEs), teachers, researchers, industry partners, project coordinators, administrators and other representatives from European and national science education projects.

# 3. OUR INTELLECTUAL OUTPUTS

DESIGN

LEARNING

WITH

## \_\_\_\_

#### A METHODOLOGICAL GUIDE TO ADAPTING ROBOTIC ASSISTED SCIENCE TEACHING TO MODERN LEARNING TEACHING MODELS

Our 2nd intellectual output is presented as a methodological guide, a holistic methodological strategy for the acquisition of key competences and skills. It is one of the main optimization tools of our project in reducing the failure in science and therefore in improving science literacy. It is designed to allow the adaptation of robotic technology to modern education approaches / strategies and science teaching with innovative teaching models developed towards them.

information contained therein"

#### COMPREHENSIVE MEASUREMENT AND EVALUATION TOOLKIT

Testing robotic assisted science learning activities; It will provide guidance on assessing their strengths and weaknesses.

It continues to be prepared. It will be made available to you soon.

https://www.scienceerobot.com/eworkbooks

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SCIENTIFIC

We designed scientific activities involving robotics in

problem-based, project-based, inquiry-based and

engineering design process learning models. Science

activities prepared in the themes determined in the

sustainable development goals were uploaded to the "e-

workbook platform", the first intellectual output of the

project. This platform contains STEM related activities in

different languages, which can be selected in different filters. We hope it can be of use to you in overcoming

PROCESS

EDUCATIONAL ROBOTIC PATTERN



difficulties in scientific learning:

#### **4th Scientix Conference**

Two of our representatives from Science E-Robot will attend the 4th Scientix Conference, which will take place on November 18 - 19, 2022, organized by Scientix, as digital posters and presentations.

The event, which will bring together key stakeholders, will include valuable work from international science education projects and academic studies.

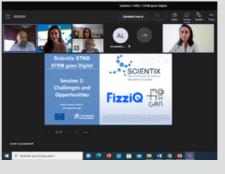
#### **Scientix Projects**

Our project has been published in the projects section of the Scientix website. Please, have a look; http://www.scientix.eu/web/guest/ projects/project-detail? articleld=1219896

#### **Erasmusdays**

Within the scope of Erasmusdays events, a national article was published in Romania and we held physical seminars in Turkey.





#### Scientix Episode

Also, our project was published in Episode 2 by Scientix. Please, have a look; http://www.scientix.eu/news/ne ws-all/news-detail? articleId=1219769





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## Science e-Robot

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## 4. CONSORTIUM



Hadiye Kuradacı Science and Art Center



T.R. MoNE Special Education and Guidance General Directorate of Services



Mersin University



Agrupamento De Escolas De Portela E Moscavide



Istituto Istruzione Scolastica Superiore "Carlo Alberto Dalla Chiesa"

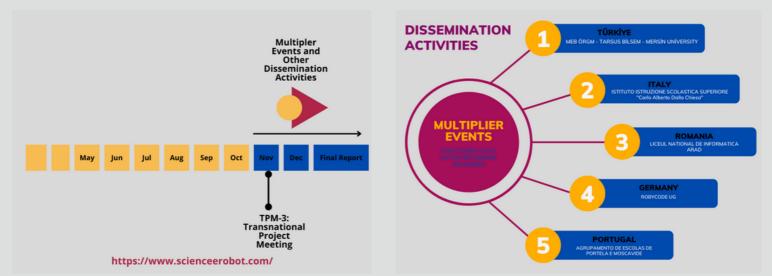


Liceul National De Informatica Arad



RobyCode UG

### **5.NEXT STEPS**



### 6.CONTACT US



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https://www.scienceerobot.com/





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